

Serial No. 10/068,843

REMARKS**INTRODUCTION:**

In accordance with the foregoing, claims 1-9 have been amended, and claims 10-12 have been added. No new matter is being presented, and approval and entry are respectfully requested. Claims 1-12 are pending and under consideration. Reconsideration is requested.

ENTRY OF AMENDMENT UNDER 37 C.F.R. §1.116:

Applicant requests entry of this Rule 116 Response because:

- (a) the amendments were not earlier presented because the Applicant believed in good faith that the cited prior art did not disclose the present invention as previously claimed;
- (b) the amendments of claims 1-9, and the addition of claims 10-12 should not entail any further search by the Examiner since no new features are being added and no new issues are being raised; and
- (c) the amendments of claims 1-9, and the addition of claims 10-12 do not significantly alter the scope of the claims, and the amendments of claims 1-9 place the application at least into a better form for purposes of appeal because they resolve the §112 objections raised by the examiner. No new features or new issues are being raised.

The Manual of Patent Examining Procedures sets forth in Section 714.12 that "any amendment that would place the case either in condition for allowance or in better form for appeal may be entered." Moreover, Section 714.13 sets forth that "the Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

REJECTION UNDER U.S.C. §112:

In the Office Action, at page 2, the Examiner rejected claims 1-9 under 35 U.S.C. § 112, second paragraph. Applicant submits that the antecedent basis rejections enumerated by the

Serial No. 10/068,843

Examiner are overcome in view of the amended claims as submitted herein.

Specifically regarding claim 1, the examiner requests clarification as to the contents of the preamble of claim 1. The preamble of claim 1 is all text preceding the ":" at claim 1, line 9.

REJECTION UNDER 35 U.S.C. §102:

In the Office Action, at page 3, the Examiner rejected claims 1, 2, 4-6 under 35 U.S.C. § 102 (b) as being anticipated by Sugai et al (US 5,019,249). The reasons for the rejection are set forth in the Office Action and are therefore not repeated. The rejection is traversed, and reconsideration is requested.

According to Sugai, a cleaning operation is interrupted when a customer makes a transaction (see Fig. 21, and column 18, lines 36-52). In other words, sensor cleaning and transaction processes are mutually exclusive; the processes can not be performed in parallel. According to the present invention, however, sensor cleaning and transaction processes are performed in parallel.

For example, amended claim 1 recites a paper processing devise comprising: "a transfer control portion that starts the paper processing process even when either of the specified abnormal status or normal status is detected ... and in the case where the specified abnormal status is detected in the initial detecting process, transfers at least one paper that passes through the discriminating portion after the start of the paper processing process until a normal status is detected in the detecting process ... wherein the sensor is cleaned by transfer of paper, and sensor cleaning and the paper processing process are accomplished in parallel."

Additionally, according to Sugai, structural elements are required to clean sensors (a lever 316 having a cleaning member 315, FIGS. 15 and 17, and column 18, lines 1-13, for example).

In contrast, according to the present invention, sensor cleaning is performed by the transfer of papers (bills and mock bills) during operation. No additional cleaning structure is required.

For example, amended claim 1 recites a paper processing devise comprising: "a transfer control portion that ... transfers at least one paper that passes through the discriminating portion after the start of the paper processing process until a normal status is detected in the detecting

Serial No. 10/068,843

process ... wherein the sensor is cleaned by transfer of paper..."

Accordingly, Applicant respectfully submits independent claim 1 patentably distinguishes over the cited art and should be allowable for at least the above-mentioned reasons.

Further, in the Office Action, at page 3, the Examiner rejected claims 2 and 4-6. Applicant respectfully submits that claims 2 and 4-6, which depend from claim 1, should also be allowable for the reasons set forth above regarding claim 1, as well as the recitations therein.

REJECTIONS UNDER 35 U.S.C. § 103:

In the Office Action, at page 4, the Examiner rejected claim 7 under 35 U.S.C. § 103 (a) as being unpatentable over Sugai et al. in view of Goto et al. (JP 11-102456). The reasons for the rejection are set forth in the Office Action and are therefore not repeated. The rejection is traversed and reconsideration is requested.

As noted above in the discussion under 35 U.S.C. § 102 (b) regarding claim 1, according to Sugai, the sensor cleaning and the transaction processes do not occur in parallel. While Goto teaches use of a line sensor, there is no teaching of parallel cleaning and transaction processes. The only method of cleaning sensors indicated in Goto is to notify "a clerk in charge" of the positions on the line sensor of paper pieces and stains (Goto Abstract). This implies that the "clerk in charge" is responsible for cleaning the sensor at some future point, necessitating an interruption in the transaction process.

As noted previously, in the present invention, sensor cleaning and transaction processes are performed in parallel. Specifically, amended claim 1 recites a paper processing devise comprising: "a transfer control portion that starts the paper processing process even when either of the specified abnormal status or normal status is detected ... and in the case where the specified abnormal status is detected in the initial detecting process, transfers at least one paper that passes through the discriminating portion after the start of the paper processing process until a normal status is detected in the detecting process ... wherein the sensor is cleaned by transfer of paper, and sensor cleaning and the paper processing process are accomplished in parallel."

Thus, while the combination of Sugai and Goto may yield a machine that functions longer between cleaning than the machine of Sugai alone, the transaction process must still be interrupted for cleaning. The combination does not teach sensor cleaning and transaction

Serial No. 10/068,843

processes occurring in parallel.

Thus, Applicant respectfully submits that claim 7, which depends from claim 1, should also be allowable for the reasons set forth above regarding claim 1, as well as the recitations therein.

In the Office Action, at page 5, the Examiner rejected claims 1 and 3 under 35 U.S.C. § 103 (a) as being unpatentable over Ono et al. (US 5,450,937) in view of Nei et al. (JP 5-324984). The reasons for the rejection are set forth in the Office Action and are therefore not repeated. The rejection is traversed and reconsideration is requested.

Ono provides a device to prevent illegal extraction of paper currency (e.g. pulling out the paper currency using a thread or tape attached to the paper currency) after the paper currency is determined to be genuine currency. More precisely, Ono describes a mechanism to prevent paper currency from going backwards to an opening.

Sensors of Ono's device only detect the passage of the paper currency before it is determined to be genuine. If these sensors are off when the device is turned on, it means that there is some abnormality in the device. But such abnormality is merely described as a jam or breakdown of the sensors, and the device starts a recovery process in which a transfer belt runs in reverse. Therefore, it is impossible for Ono's device to realize the feature of the present invention, i.e., process paper currency while the abnormality is detected, and to later detect whether the abnormality still exists.

For example, amended claim 1 recites a paper processing devise comprising: "a transfer control portion that starts the paper processing process even when either of the specified abnormal status or normal status is detected ... and in the case where the specified abnormal status is detected in the initial detecting process, transfers at least one paper that passes through the discriminating portion after the start of the paper processing process until a normal status is detected in the detecting process"

Further, as previously noted above in the discussion under 35 U.S.C. § 102 (b) regarding claim 1, according to the present invention, sensor cleaning is performed by the transfer of papers (bills and mock bills) during operation. For example, amended claim 1 recites a paper processing devise comprising: "a transfer control portion that ... transfers at least one paper that passes through the discriminating portion after the start of the paper processing process until a normal status is detected in the detecting process ... wherein the sensor is cleaned by transfer

Serial No. 10/068,843

of paper, and sensor cleaning and the paper processing process are accomplished in parallel."

Ono describes no such feature of the present invention. Nei describes a device that detects "the occurrence of jams on the transfer path," and reversely rotates mechanisms to "return the jammed notes to the cash type-based temporary holding plates." Neither Ono, nor Nei, alone or in combination, teach a device "wherein the sensor is cleaned by transfer of paper, and sensor cleaning and the paper processing process are accomplished in parallel." Therefore, even if Ono is combined with a pool portion of Nei, the present invention would not be realized.

Accordingly, Applicant respectfully submits that independent claim 1 patentably distinguishes over the cited art and should be allowable for at least the above-mentioned reasons. Additionally, Applicant respectfully submits that claim 3, which depends from claim 1, should be allowable for at least the same reasons as claim 1, as well as for the recitations therein.

NEW CLAIMS

New, independent claim 10 recites a paper processing device comprising: "...a transfer control unit to start the process, and when the sensor output abnormality detecting portion detects that the output of the sensor is in the specified abnormal status before the process begins, transfer papers through the discriminating unit to clean the sensor until a normal status is detected by the sensor output abnormality detecting portion, along a transfer route corresponding to the specified abnormal status, wherein the sensor is cleaned by transfer of paper, and sensor cleaning and the paper processing process are accomplished in parallel."

Additionally, new independent claim 11 recites a paper processing device comprising: "...a transfer control unit to start the process, and if the output of the sensor is one of normal and a first abnormal status, transfer at least one paper that is an objective of the process through the discriminating unit to clean the sensor and advance the process towards completion, and if the output of the sensor is a second abnormal status, transfer at least one paper through the discriminating unit to clean the sensor, and transfer at least one paper that is an objective of the process through the discriminating unit to advance the process towards completion, wherein the sensor is cleaned by transfer of paper, and sensor cleaning and the paper processing process are accomplished in parallel."

Further, new independent claim 12 recites a paper processing device comprising: "a

Serial No. 10/068,843

sensor output abnormality detecting portion to detect a status of an output of a sensor, that evaluates the output of the sensor at the beginning of a process, and if the status is not normal, evaluates the output of the sensor during the process; and a transfer control unit to transfer papers, wherein sensors are cleaned by the transfer of papers, and sensor cleaning and the process are accomplished in parallel.

Accordingly, Applicant respectfully submits that independent claims 10, 11, and 12 patentably distinguish over the cited art and should be allowable for at least the reasons set forth in the sections regarding the rejections under 35 U.S.C. § 102 and 35 U.S.C. § 103.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the cited art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 23 Nov 2003.

By: Michael A. Bush
Michael A. Bush
Registration No. 48,893

1201 New York Ave., NW
Suite 700
Washington, DC 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501

CERTIFICATE OF FACSIMILE TRANSMISSION
I hereby certify that this correspondence is being transmitted via facsimile to: Commissioner for Patents,
P.O. Box 1450, Alexandria, VA 22313-1450
on November 20, 2003
STAAS & HALSEY
By: Michael A. Bush
Date: 11 - 3 - 03